APPENDIX D.

Procedures for Estimating Dollar-weighted MBE/WBE Availability and Analyzing MBE/WBE Utilization

This appendix discusses BBC's approach to developing dollar-weighted estimates of relative MBE/WBE availability.

Available Firm Characteristics

Before conducting the availability and utilization analysis, BBC determined following characteristics for each firm that completed an availability survey:

- MBE/WBE status and ethnicity classification;
- Contract role;
- Geographic availability;
- Contract size limit;
- Establishment date; and
- Work specialty.

As described below, BBC used information from four sources to determine the final status in each of these categories:

- Availability survey;
- ITD contracting records;
- ITD MBE/WBE/DBE status from the Civil Rights Office; and
- Dun & Bradstreet (D&B) business profile information.

Where necessary, BBC created decision hierarchies to determine the final status for specific characteristics of each firm.

MBE/WBE status and ethnicity classification. BBC determined the MBE/WBE and ethnicity status of every firm by using:

- ITD records as the primary source of MBE/WBE status and ethnicity classification.
- MBE/WBE status and ethnicity classification from the availability survey for firms that ITD records did not cover. BBC resolved conflicts between the availability survey data and ITD records on a case-by-case basis. Conflicting ethnicity was resolved by calling the firm again or by discussing the firm with ITD staff.
- D&B MBE/WBE status and ethnicity for firms missing information in ITD records that were not successfully contacted in the availability survey.

Contract role. BBC assigned each firm a contract role as either prime contractor, subcontractor, or prime and subcontractor using:

- The contract role as indicated in the availability survey.
- The contract role from ITD contracting records if the firm did not mention that role during the availability survey. For example, a firm might have indicated only prime contractor status in their availability survey response, but appeared on a contract as a subcontractor. The final role classification for that firm would be prime and subcontractor.

Geographic availability. BBC determined geographic availability in the six ITD districts for each firm by using:

- Availability across Districts 1-6 as indicated in the availability survey.
- Availability across Districts 1-6 based on the districts where the firm has performed work. BBC only added geographic availability information to a firm's availability survey response. For example, a firm might have indicated in their survey response that they are available to work in Districts 1 and 2, however ITD records show the firm performed work on a contract in District 3. The final geographic availability for that firm would be Districts 1, 2 and 3.

Largest contract. BBC determined the largest contract or subcontract amount each firm had performed or bid on using:

- The largest contract amount reported in the availability survey.
- The largest amount each firm won according to ITD contracting records, if this exceeded the amount reported in the availability survey. For example, if ITD listed a firm's largest contract during the study period at \$1 million, but firm only reported availability for contracts under \$500,000, BBC would consider the firm available for contracts of up to \$1 million.

Establishment date. BBC used the establishment date reported in the availability survey where available. Firms that could not recall or did not report an establishment date were presumed to have been founded before the study period.

Work specialty. The work specialty code for each firm is based on the description of the main line of business confirmed or identified by the firm owner or manager in the availability survey.

Procedures for Determining MBE/WBE Availability

BBC used "firms," rather than "business establishments," as the unit of analysis for availability calculations. BBC screened firms for the availability analysis by applying two types of criteria:

- Fundamental criteria that a firm must meet to be considered in the analysis (regardless of the contract); and
- Criteria that a firm must meet to be considered for a particular contract.

Fundamental availability criteria. A firm must meet the following criteria to be counted in the MBE/WBE availability analysis for any contract element.

- Have a working phone number and someone who will answer the phone or return a phone call;
- Have an owner or manager who is willing to take part in the availability survey and be able to complete the survey in English;
- Confirm that the firm performs work related to transportation construction, maintenance or design;
- Be a for-profit business, not a public agency or not-for-profit organization;
- Confirm that the firm has a primary line of business within one of the areas of focus of the availability analysis;
- Have performed or bid on past ITD, local government or private sector transportation construction or engineering contracts as a prime contractor, subcontractor, or both during the study period;
- Be qualified and interested in working with ITD on future transportation construction or engineering contracts; and
- Be willing to work in at least one of the six ITD districts.

Contract specific screening criteria. Firm availability for a particular set of contracts was determined contract-by-contract for each element of a contract (i.e., prime portion and subcontract portions).

Firms were counted as available for some prime contracts or subcontracts and not for others depending upon the characteristics of the contract element and the characteristics of the firm.

For each contract element, the study team identified:

- Location the work took place(one of six regions based on ITD districts);
- Contract role (prime contractor or subcontractor);
- Contract size or contract element size;
- Bid open date for the contract; and
- Work specialty.

Location. Available firms were required to have a geographic availability status that included the district where the work was conducted (as reported by ITD).

Contract role. To be counted as available for a prime contract element, the firm must qualify for prime contractor roles according to the criteria discussed above. Similarly, to be counted as available for a subcontract element, a firm must have been assigned a subcontractor role.

Contract amounts. Available firms for subcontract elements were required to have a largest contract status greater than or equal to the size of the contract element. For prime contract elements, available firms needed a largest contract status equal to or greater than the entire contract amount.

Contract date. To be counted as available for a contract element, firms were required to have an establishment date during or before the year in which that prime contract began.

Work specialty. Each contract element was assigned a "work specialty code" based on the main line of work of the firm that actually performed the contract element. For utilized firms, BBC determined the work specialty based on the following hierarchy:

- The work specialty of the firm reported in the availability survey;
- The work specialty of the firm reported in the utilization survey if the firm did not complete an availability survey;
- The work specialty based on D&B SIC code information for the firm if the firm did not complete either survey; and
- Information reported on the Website of the firm if no D&B information was available.

For the majority of contract elements, available firms were required to have the same work specialty code as the contract element under consideration. In some cases, the work specialty code of a contract element was outside the core areas that were studied in the Availability Survey. These specialty areas were coded as other construction, other construction supply, or other professional services. With respect to specialty area, MBE/WBE availability for contract elements with these specialty areas were determined as follows:

- Other construction. All firms with a construction related specialty code were considered as a proxy for firms in these specialties.
- Other suppliers. All firms with a supply related specialty code were considered as a proxy for firms in these specialties.
- Other professional services. All firms with a professional services related specialty code were considered as a proxy for firms in these specialties.

In some cases, the work specialty code on an ITD contract element could not be identified beyond general construction or engineering work. Availability for those work elements was based on all firms that do prime or subcontracting work (for construction versus engineering contracts).

For a small number of contract elements, no firms fitting the specialty criteria were initially considered available. BBC reclassified each of these elements in one of three broader industry categories:

- General construction;
- General supply; and
- General professional services.

All firms in related specialty areas (e.g., all construction firms for a "general construction" element) were used as a proxy for firms in the specific specialty area when determining relative MBE/WBE availability for these contract elements.

A few utilized firms had work specialty codes outside of the scope of our analysis. Contract elements completed by these firms were excluded from the study.

Dollar-Weighting of MBE/WBE Availability across Contracts

The process described above relates to determining relative MBE/WBE availability for a specific contract element. To develop an availability figure pertaining to many different contracts, BBC weighted the MBE/WBE availability for a contract element by the dollars awarded for that contract element. Large subcontracts received a proportionally greater weight than smaller subcontracts.

The Disparity Study examines transportation construction and engineering contracts that ITD awarded between January 2002 and December 2006. These contracts involve both prime contractors and subcontractors ("prime consultants" and "subconsultants" for transportation engineering contracts). The balance of this appendix reviews the data ITD currently collects and maintains for these contracts and the additional data the study team collected to complete the MBE/WBE utilization analysis.

ITD Firm and Contract Information

The study team received information for ITD construction and engineering contracts during early 2007.

Civil Rights database. The Civil Rights database records business profile information of firms that have bid or registered with ITD. Information in the Civil Rights database includes: firm name; average annual gross revenue; firm owner race, ethnicity and gender; DBE certification classification; DBE certification periods; and industry classifications. This database was used to determine DBE status of utilized and available firms and as a source of information on MBE/WBE status and race and ethnicity information.

Commit Track database. The Commit Track database contains contract information on construction and engineering projects including location of work, funding source, and contract amount. BBC used the Commit Track database to determine location of work and funding data for most agreements. For agreements not listed in the Commit Track database, BBC asked the Consultant Agreement Administration department to determine location of work and funding source.

CAMS database. ITD maintains information about prime and subcontracts of highway-related construction contracts in a database called CAMS. Prime contract information from CAMS includes project bid open date, firm name, location of work, contract amount, and funding source.

Subcontract information in the CAMS database includes subcontractor(s) name, second tier subcontractor(s) name, and contract amount to sub. BBC did not include second tier subcontractors in the analysis (second tier dollar amounts were included in the first tier subcontract amount.)

BBC used ITD construction contract information for the period of January 2002 through 2006 from the CAMS database.

PATS database. ITD's Consultant Agreement Administration department maintains information of highway-related engineering agreements in its PATS database. BBC used the PATS database for prime consultant information including firm name, agreement date, not-to-exceed amount, additional services amount, and supplementary services amount. Subconsultant information in the PATS database includes firm name, subconsultant cost, and sub supplementary services amount.

The PATS database does not contain location of work or funding source information.

Verification of Contract Information

BBC compiled vendor information including vendors' DBE and WBE/MBE status, ethnicity where appropriate and the sum of contract amounts awarded to these firms during the study period. As a part of this process, BBC attempted to contact firms by telephone to verify basic firm information for businesses not previously included in the Availability Survey. ITD staff then reviewed this material to:

- Identify separate establishments that belonged to a single firm;
- Verify contract dollar amounts; and
- Check DBE certification status, WBE/MBE status and ethnicity.

Using ITD's feedback, BBC finalized the vendor and contract data.